



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: ISPH-0526  
Inventors: McKay et al.  
Serial No.: 09/774,809  
Filing Date: January 31, 2001  
Examiner: Not Yet Assigned  
Group Art Unit: Not Yet Assigned  
Title: Antisense Oligonucleotide Compositions  
and Methods for the Modulation of JNK  
Proteins

Jane Massey Licata, Patent No. 32,257, Serial No. 09/774,809  
is hereby assigned to the U.S. Patent and Trademark Office  
for the purpose of filing an application for a patent in the U.S.  
Patent and Trademark Office.

March 6, 2001

~~Jane Massey Licata~~  
Jane Massey Licata, Patent No. 32,257

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

(XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into

Office Action on the merits of the above-identified application, no additional fee is required.



- ( ) In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.11, therefore:
- ( ) Certification in Accordance with §1.97(e) is set forth below; or
- ( ) The fee of \$240.00 as set forth in §1.17(p) is attached.
- ( ) In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.11 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).
- ( ) Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.
- (xx) In accordance with §1.93(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior



application Serial No. 09/396,902, filed September 15, 1999,  
Serial No. 09/287,796, filed April 7, 1999, Serial No.  
09/130,616, filed August 7, 1998 and Serial No. 08/910,629,  
filed August 13, 1997, for which a claim for priority under  
35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to  
Deposit Account No. 50-1619. This form is submitted in  
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( ) The relevance of the listed references in a foreign language  
is as stated in the specification at pages 03.

(XX) All listed references are in the English language.

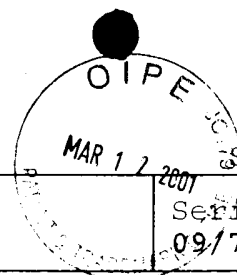
Respectfully submitted,

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Date: March 6, 2001

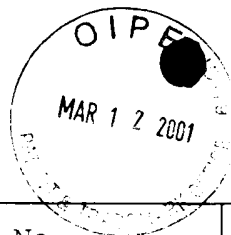
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
AA	Ausubel et al., eds., "A Compendium of Methods from Current Protocols in Molecular Biology", Short Protocols in Molecular Biology, 2nd Ed., John Wiley & Sons, New York, 1992, pages 3-11 to 3-44 and 4-17 to 4-18	
AB	Ausubel et al., eds., "A Compendium of Methods from Current Protocols in Molecular Biology", Short Protocols in Molecular Biology, 2nd Ed., John Wiley & Sons, New York, 1992, pages 2-24 to 2-30 and 4-14 to 4-29	
AC	Ausubel et al., eds., "A Compendium of Methods from Current Protocols in Molecular Biology", Short Protocols in Molecular Biology, 2nd Ed., John Wiley & Sons, New York, 1992, pages 10-33 to 10-35	
AD	Alahari et al., "The fission yeast prp4+ gene involved in pre-mRNA splicing codes for a predicted serine/threonine kinase and is essential for growth", Nucl. Acids Res., 1993, 21, 4079	
AE	Albert et al., "Antisense knockouts: molecular scalpels for the dissection of signal transduction", Trends Pharmacol. Sci., 1994, 15:250	
AF	Alberts et al., eds., In: Molecular Biology of the Cell, Garland Publishing, Inc., New York, 1983, Chapter 16	
AG	Alberts et al., Molecular Biology of the Cell, 1983, Garland Publishing Inc., New York, pp. 411-415	
AH	Angel et al., "Oncogene jun encodes a sequence-specific trans-activator similar to AP-1", Nature, 1988, 332, 166	
AI	Angel and Karin, " The role of Jun, Fos and the AP-1 complex in cell-proliferation and transformation", Biochim. Biophys. Acta, 1991, 1072, 129	
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	AJ	Benet et al., Chapter 1 In: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 9th Ed., Hardman et al., eds., McGraw-Hill, New York, NY, 1996, pages 5-7	
	AK	Berge et al., "Pharmaceutical Salts," J. of Pharma Sci., 1977, 66:1	
	AL	Bernhard et al., "Direct evidence linking expression of matrix metalloproteinase 9 (92-kDa gelatinase/collagenase) to the metastatic phenotype in transformed rat embryo cells", Proc. Natl. Acad. Sci.U.S.A., 1994, 91, 4293	
	AM	Birkedal-Hansen, "Proteolytic remodeling of extracellular matrix", Current Op. Biol., 1995, 7, 728	
	AN	Binetruy et al., "Ha-Ras augments c-Jun activity and stimulates phosphorylation of its activation domain", Nature, 1991, 351, 122	
	AO	Blume and Cevc, "Liposomes for the sustained drug release in vivo", Biochem. et Biophys. Acta, 1990, 1029, 91	
	AP	Bohmann et al., "Human Proto-Oncogene c-jun Encodes a DNA Binding Protein with Structural and Fuctional Properties of Transcription Factor AP-1", Science, 1987, 238, 1386	
	AQ	Brigstock et al., "Species-Specific High Molecular Weight Forms of Basic Fibroblast Growth Factor", Growth Factors, 1990, 4, 45	
	AR	Brunton, "Drugs Affecting Gastrointestinal Functions", Chapter 4 In: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 9th Ed., Hardman et al., eds., McGraw-Hill, New York, NY, 1996, pages 924-935	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	

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	AS	Buur et al., "Penetration of 5-Fluorouracil And Prodrugs Across the Intestine of the Albino Rabbit:Evidence For Shift in absorption site from the upper to the lower region of the Gastrointestinal tract of products", J. Control Rel., 1990, 14:43			
	AT	Biedler et al., "Apology and Growth, Tumorigenicity, and Cytogenetics of Human Neuroblastoma Cells in Continuous Culture <sup>1</sup> ", Cancer Res., 1973, 33, 2643			
	AU	Cano et al., "Parallel signal processing among mammalian MAPKs", Trends Biochem. Sci., 1995, 20, 117			
	AV	Cheng et al., "Bidirectional Regulation of p38 Kinase and c-Jun N-terminal Protein Kinase by Insulin-like Growth Factor-I*", J. Biol. Chem., 1998, 273, 14560			
	AW	Chonn and Cullis, "Recent advances in liposomal drug-delivery systems", Current Op. Biotech., 1995, 6, 698			
	AX	Cioffi et al., "Selective Inhibition of A-Raf and C-Raf mRNA Expression by Antisense Oligodeoxynucleotides in Rat Vascular Smooth Muscle Cells: Role of A-Raf and C-Raf in Serum-Induced Proliferation", (Mol. Pharmacol., 1997, 57, 383)			
	AZ	Cobb et al., "How MAP Kinases Are Regulated", J. Biol. Chem., 1995, 270, 14843			
	BA	Crooke et al., "Progress in the development and patenting of antisense drug discovery technology", Exp. Opin. Ther. Patents, 1996, 6:855			
	BB	Crooke et al., "Pharmacokinetic Properties of Several Novel Oligonucleotide Analogs in mice", J. Pharmacol. Exp. Ther., 1996, 277:923			
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>			

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U.S. Department of Commerce Patent and Trademark Office			
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	BC	Crooke et al., eds., Chapter 26 In: Antisense Research and Applications, CRC Press, Boca Raton, FL, 1993, pages 461-469	
	BD	Dean et al., "Inhibition of protein kinase C- $\alpha$ expression in mice after systemic administration of phosphorothioate antisense Oligodeoxynucleotides", Proc. Natl. Acad. Sci. U.S.A., 1994, 91:11762-11766	
	BE	Derijard et al., "JNK1: A Protein Kinase Stimulated by UV Light and Ha-Ras That Binds and Phosphorylates the c-Jun Activation Domain", Cell, 1994, 76, 1025	
	BF	Fraley et al., Trends Biochem. Sci., 1981, 6, 77	
	BG	Ettinger et al., "Intrathecal Methotrexate Overdose Without Neurotoxicity", 1978, Cancer, 41, 1270, 1978	
	BH	Ewel et al., "Polyinosinic-Polycytidylic Acid Complexed with Poly-L-lysine and Carboxymethyl cellulose in Combination with Interleukin 2 in Patients with Cancer: Clinical and Immunological Effects", Cancer Research,	
	BI	El-Hariri et al., "The Mitigating Effects of Phosphatidylcholines on Bile Salt- and Lysophosphatidylcholine-induced", J. Pharm. Pharmacol., 1992, 44:651	
	BJ	French et al., "Expression of Two Related Nonstructural Proteins of Bluetongue Virus (BTV) Type 10 in Insect Cells by a Recombinant Baculovirus: Production of Polyclonal Ascitic Fluid and Characterization of the Gene Product in	
	BK	Gao et al., "Cloning and Characterization of a Mouse Gene with Homology to the Human von Hippel-Lindau Disease Tumor Suppressor Gene: Implications for the Potential Organization of the Human von Hippel-Lindau Disease Gene",	
EXAMINER		DATE CONSIDERED	

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	BL	Gelbert et al., "Analysis of GPT Activity in Mammalian Cells with a Chromosomally Integrated Shuttle Vector Containing Altered gpt Genes", Somat. Cell. Mol. Genet., 1990, 16, 173	
	BM	Gebeyehu, G., et al., "Novel biotinylated nucleotide - analogs for labeling and calorimetric detection of DNA", Nucleic Acids Res., 1987, 15, 4513	
	BN	Gold and Stormo, in: Escherichia coli and Salmonella typhimurium: Cellular and Molecular Biology, Vol. 2, 1987, Neidhardt et al., eds., "Transitional Initiation", American Society for Microbiology, Washington, D.C., p. 1303	
	BO	Gupta et al., "Selective interaction of JNK protein kinase isoforms with transcription factors", EMBO J., 1996, 15, 2760	
	BP	Gupta et al., "Transcription Factor ATF2 Regulation by the JNK Signal Transduction Pathway", Science, 1995, 267, 389	
	BQ	Gum et al., "Stimulation of 92-kDa Gelatinase B Promoter Activity by ras Is Mitogen-activated Protein Kinase Kinase 1-independent and Requires Multiple Transcription Factor Binding Sites Including Closely	
	BR	Harvey, "Absorption of Drugs", Chapter 35 In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA, 1990, page 711	
	BS	Hirahata et al., Gan To Kagaku Ryoho, 1992, 19(10):1591	
	BT	Hua et al., "Inhibition of Matrix Metalloproteinase 9 Expression by a Ribozyme Blocks Metastasis in a Rat Sarcoma Model System", Cancer Res., 1996, 56, 5279	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	



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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	BU	Jalava et al., "Effects of Bryostatins 1 and 2 on Morphological and Functional Differentiation of Sh-Sy5Y Human Neuroblastoma Cells", <i>Cancer Res.</i> , 1990, 50, 3422
	BV	Kabanov et al., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells", <i>FEBS</i>
	BW	Kanagasundaram et al., "Isolation and characterization of the gene encoding gluconolactonase from <i>Zymomonas mobilis</i> ", <i>Biochim. Biophys. Acta</i> , 1992, 1171, 193
	BX	Kallunki et al., "JNK2 contains a specificity-determining region responsible for efficient c-Jun binding and phosphorylation", <i>Genes &amp; Development</i> , 1994, 8, 2996
	BY	Kemeny et al., "A Pilot Study of Hepatic Artery Floxuridine Combined with Systemic 5-Fluorouracil and Leucovorin", <i>Cancer</i> , 1993, 71, 1964
	BZ	Kerr et al., "Growth Factors Regulate Transin Gene Expression by c-fos-Dependent and c-fos-Independent Pathways", <i>Science</i> , 1988, 242, 1424-1427
	CA	Kerr et al., "TGF-B1 Inhibition of Transin/Stromelysin Gene Expression Is Mediated through a Fos Binding Sequence", <i>Cell</i> , 1990, 61, 267
	CB	Katocs et al., Chapter 27 In: <i>Remington's Pharmaceutical Sciences</i> , 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA, 1990
	CC	Kornberg, A., "Primary Structure <sup>11</sup> ", <i>DNA Replication</i> , W.H. Freeman & Co., San Francisco, 1980, pages 4-7

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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CD	Kyriakis et al., "The stress-activated protein kinase subfamily of c-Jun kinases", Nature, 1994, 369, 156
CE	Letsinger et al., "Cholesteryl-conjugated oligonucleotides: Synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture", proc. Natl. Acad. Sci. U.S.A.,
CF	Lappalainen et al., "Cationic liposomes mediated delivery of antisense oligonucleotides targeted to HPV 16 E7 mRNA in CaSki cells", Antiviral Res., 1994, 23, 119
CG	Luer and Hatton, "Vancomycin Administration into the Cerebrospinal Fluid", The Annals of Pharmacotherapy, 1993, 27, 912
CH	Lee et al., "Critical Reviews in Therapeutic Drug Carrier Systems", Critical Reviews in Therapeutic Drug Carrier Systems, 1991, 8:91-192
CI	Longer et al., Chapter 91 In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA, 1990
CJ	Martin et al., Helv. Chim. Acta, 1995, 78:486
CK	McCrishita et al., "Single intraluminal delivery of antisense cdc2 kinase and proliferating-cell nuclear antigen oligonucleotides results in chronic inhibition of neointimal hyperplasia", Proc. Natl. Acad. Sci. U.S.A., 1993,
CL	Mohit et al., "p49 <sup>3F12</sup> Kinase: A Novel MAP Kinase Expressed in a Subset of Neurons in the Human Nervous System", Neuron, 1995, 14, 67

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	CLL	Martin et al., "Developmental expression in the mouse nervous system of the p49 <sup>3F12</sup> SAP kinase", Brain Res. Mol. Brain Res., 1996, 35, 47	
	CM	Manoharan et al., "Lipidic Nucleic Acids", Tetrahedron Lett., 1995, 36:3651	
	CN	Manoharan et al., "Oligonucleotide Conjugates: Alteration of the Pharmacokinetic Properties of Antisense Agents", Nucleosides & Nucleotides, 1995, 14:969	
	CO	Manoharan et al., "Cholic Acid-Oligonucleotide Conjugates for Antisense Applications", Bioorg. Med. Chem. Lett., 1994, 4:1053	
	CF	Manoharan et al., "Antisense Strategies", Ann. N.Y. Acad. Sci., 1992, 660:306	
	CQ	Manoharan et al., "Introduction of Lipophilic Thioether Tether in the minor groove of Nucleic acids for Antisense Applications", Bioorg. Med. Chem. Lett., 1993, 3:2765	
	CR	Markussen et al., "Translational control of oskar generates Short OSK, the isoform that induces pole plasm assembly", Development, 1995, 121, 3723	
	CS	McDermott et al., "Structure and lens expression of the gene encoding chicken BA3/A1-crystallin", Gene, 1992, 117, 193	
	CT	The Merck Manual of Diagnosis and Therapy, "Oncology", 15th Ed., pp. 1206-1228, Berkow et al., eds., Rahay, N.J., 1987	
EXAMINER		DATE CONSIDERED	

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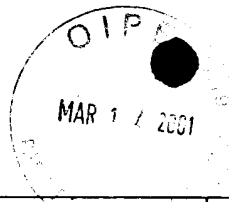
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	CU	Monaco et al., "Structure of Two Rat Genes Coding for Closely Related Rolipram-sensitive cAMP Phosphodiesterases", J. Biol. Chem., 1994, 269, 347
	CV	Mishra et al., "Improved leishmanicidal effect of phosphorotioate antisense oligonucleotides by LDL-mediated delivery", Biochim. Biophys. Acta, 1995, 1264:229
	CW	Muranishi, "Absorption Enhancers", Critical Reviews in Therapeutic Drug Carrier Systems, 1990, 7:1
	CK	Miyao et al., "Stability and Pharmacokinetic Characteristics of Oligonucleotides Modified at Terminal Linkages in Mice", Antisense Res. Dev., 1995, 5:115
	CY	Mannino et al., "Liposome Mediated Gene Transfer", Biotechniques, 1988, 6, 682
	CZ	Mullins et al., Chapter 36 In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA, 1990, pages 1581-1595
	DA	Nairn, Chapter 83; In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA, 1990
	DB	Nies et al., Chapter 3 In: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 9th Ed., Hardman et al., eds., McGraw-Hill, New York, NY, 1996
	DC	Nielsen et al., "Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide", Science, 1991, 254:1497

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	DD	Oberhauser et al., "Effective incorporation of 2'-O-methyl-oligoribonucleotides into liposomes and enhanced cell association through modification with thiocholesterol", Nucl. Acids Res., 1992, 20:533	
	DE	Olsen et al., "Inhibition of Protein Kinase-A by Overexpression of the Cloned Human Protein Kinase Inhibitor", Mol. Endocrinol., 1991, 5, 1246	
	DF	Perri et al., "Interactions of Plasmid-encoded Replication Initiation Proteins with the Origin of DNA Replication in the Broad Host Range Plasmid RK2*", J. Biol. Chem., 1991, 266, 12536	
	DG	Pushpa-Rekha et al., "Rat Phospholipid-hydroperoxide Glutathione Peroxidase", J. Biol. Chem., 1995, 270, 26993	
	DH	Rahmsdorf, The FOS and JUN Families of Transcription Factors, Angel and Herrlich, Eds., CRC Press, Boca Raton, FL, 1994, Chapter 13	
	DI	Rapp et al., The FOS and JUN Families of Transcription Factors, Angel and Herrlich, Eds., CRC Press, Boca Raton, FL, 1994, Chapter 16	
	DJ	Raitano et al., "The Bcr-Abl leukemia oncogene activates Jun kinase and requires Jun for transformation", Proc. Natl. Acad. Sci. (USA), 1995, 92, 11746	
	DK	Rogers et al., "Alternative splicing dictates translational start in Epstein-Barr virus transcripts", EMBO J., 1990, 9, 2273	
	DL	Rubenstein et al., "Antisense Oligonucleotide Intravesicular Therapy for Human PC-3 Prostate Tumors Carried in Athymic Nude Mice", J. Surg. Oncol., 1996, 62, 194	
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	DM	Ruth, "Oligonucleotide-Enzyme Conjugates", Chapter 6 In: Methods in Molecular Biology, Vol. 26: Protocols for Oligonucleotide Conjugates, Agrawal, ed., Humana Press Inc., Totowa, NJ, 1994, pages 167-185	
	DN	Ruoslahti, "How Cancer Spreads", Sci. Amer., 1996, 275, 72	
	DO	Sambrook et al., "Labeling the 5 terminus of DNA with Bacteriophage T4 polynucleotide kinase", Molecular Cloning. A Laboratory Manual, Cold Spring Harbor Laboratory Press, 1989, Volume 2, pg. 10.59	
	DP	Singleton et al., "Type I Insulin-like Growth Factor Receptor Activation Regulates Apoptotic Proteins", J. Biol. Chem. 1996 271, 31791	
	DQ	Sluss et al., "Signal Transduction by Tumor Necrosis Factor Mediated by JNK Protein Kinases", Mol. Cell. Biol., 1994, 14, 8376	
	DR	Stetler-Stevenson et al., "Tumor Cell Interactions with the Extracellular Matrix During Invasion and Metastasis", Annu. Rev. Cell Biol., 1993, 9, 541	
	DS	Seger et al., "The MAPK signaling cascade", FASEB J., 1995, 9, 726	
	DT	Shaw, "Treatment of Intractable Cancer Pain by Electronically Controlled Parenteral Infusion of Analgesic Drugs", Cancer, 1993, 72(11), 3416	
	DU	Smeal et al., "Oncogenic and transcriptional cooperation with Ha-Ras requires phosphorylation of c-Jun on serines 63 and 73", Nature, 1991, 354, 494	
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DV	Saul et al., "celB, a Gene Coding for a Bifunctional Cellulase from the Extreme Thermophile 'Caldocellum saccharolyticum'", Appl. Environ. Microbiol., 1990, 56, 3117
DW	Saison-Behmoaras et al., "Short modified antisense oligonucleotides directed against Ha-ras point mutation induce selective cleavage of the mRNA and inhibit T24 cells proliferation", EMBO J., 1991, 10:111
DX	Svinarchuk et al., "Inhibition of HIV proliferation in MT-4 cells by antisense oligonucleotide conjugated to lipophilic groups", Biochimie, 1993, 75:49
DY	Shea et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates", Nucl. Acids Res., 1990, 18:3777
DZ	Takahashi et al., "The Use of a Perfluorochemical Emulsion as a Vascular Perfusate in Drug Absorption", J. Pharm. Pharmacol., 1988, 40:252
EA	Takakura et al., "Uptake Characteristics of Oligonucleotides in the Isolated Rat Liver Perfusion System", Antisense & Nucl. Acid Drug Dev., 1996, 6:177
EB	U.S. Congress, "The State-of-the-Art in Genetic Screening", Office of Technology Assessment, Chapter 5 In: Genetic Monitoring and Screening in the Workplace, OTA-BA-455, U.S. Government Printing Office, Washington, D.C., 1990, pages 75-99
EC	Van Berge-Henegouwen et al., "Pharmacology of Chenodeoxycholic Acid", Gastroenterology, 1977, 73:300
ED	Vogt, The FOS and JUN Families of Transcription Factors, Angel and Herrlich, Eds., CRC Press, Boca Raton, FL, 1994, Chapter 15

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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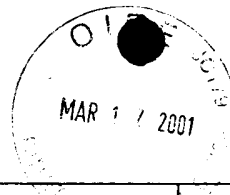
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List of Patents and Publications Cited by Applicant (Use several sheets if necessary)		Applicant McKay et al.	
		Filing Date January 31, 2001	Group Not Yet Assigned
U.S. Department of Commerce Patent and Trademark Office			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	EE	Whitesell et al., "Stability, clearance and disposition of intraventricularly administered Oligodeoxynucleotides: Implications for therapeutic application within the central nervous system", Proc. Natl. Acad. Sci. USA, 1993, 90, 4665	
	EF	Wahlestedt et al., "Modulation of Anxiety and Neuropeptide Y-Y1 Receptors by Antisense Oligodeoxynucleotides", Science, 1993, 259:528	
	EG	Wahlestedt et al., "Antisense Oligodeoxynucleotides to NMDA-R1 receptor channel protect cortical neurons from excitotoxicity and reduce focal ischaemic infarctions", Nature, 1993, 363:260	
	EH	Yamashita et al., "Effects of diclofenac sodium and disodium ethylenediaminetetraacetate on electrical parameters of the mucosal membrane and their relation to the permeability enhancing effects in the rat jejunum" J. Pharm. Pharmacol., 1987, 39:621	
	EI	Yaoita et al., "Xenopus laevis a and B thyroid hormone receptors", Proc. Natl. Acad. Sci. USA, 1990, 87, 7090	
	EJ	Yaida et al., "Distribution of phosphodiester and phosphorothioate oligonucleotides in rat brain after intraventricular and intra hippocampal administration determined by in situ hybridization", Regul. Pept., 1995, 59, 193	
	EK	Zimm et al., "Cerebrospinal Fluid Pharmacokinetics of Intraventricular and Intravenous Aziridinybenzoquinone", Cancer Research, 1984, 44, 1698	
	EL	DeVirgilio et al., "Cloning and Disruption of a Gene Required for Growth on Acetate but not on Ethanol: the Acetyl-Coenzyme A Synthetase Gene of Saccharomyces cerevisiae", Yeast, 1992, 8, 1043	
	EM	Bubulya et al., "C-Jun Can Mediate Androgen Receptor-induced Transactivation", J. Biol. Chem. 1996 271, 24583-24589	
EXAMINER		DATE CONSIDERED	

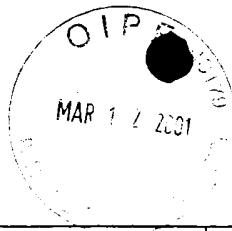


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<b>Form PTO-1449 Modified</b>  List of Patents and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce		Docket No. <b>ISPH-0526</b>	Serial No. <b>09/774,809</b>
		Applicant <b>McKay et al.</b>	
		Filing Date <b>January 31, 2001</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	EN	Avis, Chapter 84 In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA, 1990 pages 1545-1569	
	EO	Block, In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA 1990 Chapter 87 pages 1596-1609	
	EP	Block, In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA 1990 Chapter 87 pages 1609-1614	
	EQ	Hibi et al., "Identification of an oncoprotein-and UV-responsive protein kinase that binds and potentiates the c-Jun activation domain", Genes & Dev. 1993 7:2135	
	ER	Himelstein et al., Invasion & Metastasis 1994 14:246	
	ES	Porter, Chapter 90; In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA 1990	
	ET	Rudnic et al., "Oral Solid Dosage Forms", Chapter 89 In: Remington's Pharmaceutical Sciences, 18th Ed., Gennaro, ed., Mack Publishing Co., Easton, PA 1990	
	EU	Sambrook et al., eds., "Preparation of Radiolabeled DNA and RNA Probes", Chapter 10 In: Molecular Cloning: A Laboratory Manual, 2nd Ed., pages 10.1-10.7	
	EV	Sambrook et al., eds., Extraction, Purification, and Analysis of Messenger RNA from Eukaryotic Cells", Chapter 7 In: Molecular Cloning: A Laboratory Manual, 2nd Ed., pages 7.1-7.87	
EXAMINER		DATE CONSIDERED	



<b>Form PTO-1449 Modified</b>		Docket No. <b>ISPH-0526</b>	Serial No. <b>09/774,809</b>
List of Patents and Publications Cited by Applicant (Use several sheets if necessary)		Applicant <b>McKay et al.</b>	
		Filing Date <b>January 31, 2001</b>	Group <b>Not Yet Assigned</b>
U.S. Department of Commerce			
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	EW	Burr et al., <i>J. Control Rel.</i> 1990 14:43	
	EX	Thrall F.S. et al., "Bleomycin", <i>Bleomycin In: Pulmonary Fibrosis</i> pp. 777-836 Eds., Phan, S.H. and Thrall, R.S., Marcel Dekker, New York 1995	
	EY	Giri, S.N. et al., "Miscellaneous Mediator Systems in Pulmonary Fibrosis", <i>Pulmonary Fibrosis</i> 231-292, Eds. Phan, S.H. and Thrall, R.S., Marcel Dekker, New York 1995	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	



<b>Form PTO-1449 Modified</b>  List of Patents and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office	Docket No. <b>ISPH-0526</b>	Serial No. <b>09/774,809</b>
	Applicant <b>McKay et al.</b>	
	Filing Date <b>January 31, 2001</b>	Group <b>Not Yet Assigned</b>

**U. S. PATENT DOCUMENTS**

Examiner		Document	Date	Name	Class	Subclass
	AA	4,689,320	8-25-87	KAJI	514	44
	AB	4,806,463	2-21-89	GOODCHILD ET AL.	435	5
	AC	4,835,263	5-30-89	NGUYEN ET AL.	536	27
	AD	5,004,810	4-2-91	DRAPER	536	27
	AE	5,034,506	7-23-91	SUMMERTON ET AL.	528	491
	AF	5,087,617	2-11-92	SMITH	514	44
	AG	5,098,890	3-24-92	GEWIRTZ ET AL.	514	44
	AH	5,135,917	8-4-92	BURCH	514	44
	AI	5,133,045	8-11-92	COOK ET AL.	536	27
	AJ	5,166,195	11-24-92	ECKER	514	44

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Country	Translation YES NO	
	AK	WO 92/20823	11-26-92	PCT	X	
	AL	WO 93/24510	12-9-93	PCT	X	
	AM	WO 96/32496	10-17-96	PCT	X	
	AN	WO 96/34008	10-31-96	PCT	X	

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	Applicant <b>McKay et al.</b>	
	Filing Date <b>January 31, 2001</b>	Group <b>Not Yet Assigned</b>

## U. S. PATENT DOCUMENTS

Examiner		Document	Date	Name	Class	Subclass
	AO	5,194,428	3-16-93	AGRAWAL ET AL.	514	44
	AP	5,212,295	5-18-93	COOK	536	25.7
	AQ	5,218,105	6-8-93	COOK ET AL.	536	25.31
	AR	5,223,618	6-29-93	COOK ET AL.	544	276
	AS	5,242,906	9-7-93	PAGANO ET AL.	514	44
	AT	5,264,423	11-23-93	COHEN ET AL.	514	44
	AU	5,276,019	1-4-94	COHEN ET AL.	514	44
	AV	5,286,717	2-15-94	COHEN ET AL.	514	44
	AW	5,378,825	1-3-95	COOK ET AL.	536	25.34
	AX	5,386,023	1-31-95	SANGHVI ET AL.	536	25.3

## FOREIGN PATENT DOCUMENTS

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09/774,809Applicant  
McKay et al.Filing Date  
January 31, 2001Group  
Not Yet Assigned**U. S. PATENT DOCUMENTS**

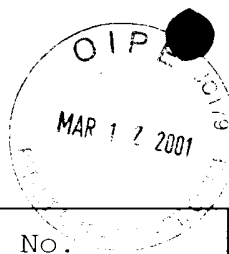
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	AY	5,457,191	10-10-95	COOK ET AL.	536	27.13
	AZ	5,459,255	10-17-95	COOK ET AL.	536	27.13
	BA	5,506,351	4-9-96	MCGEE	536	25.3
	BB	5,512,438	4-30-96	ECKER	435	6
	BC	5,521,302	5-28-96	COOK	536	25.31
	BD	5,539,082	7-23-96	NIELSEN ET AL.	530	100
	BE	5,541,307	7-30-96	COOK ET AL.	536	23.1
	BF	5,554,746	9-10-96	RAVIKUMAR ET AL.	540	100
	BG	5,571,902	11-5-96	RAVIKUMAR ET AL.	536	22.1
	BH	5,578,718	11-26-96	COOK ET AL.	536	27.21

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Country	Translation YES	NO

EXAMINER

DATE CONSIDERED



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	Applicant <b>McKay et al.</b>	
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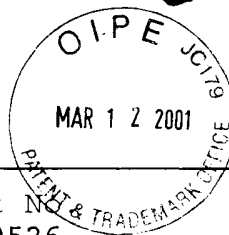
**U. S. PATENT DOCUMENTS**

Examiner		Document	Date	Name	Class	Subclass
	BI	5,587,361	12-24-96	COOK ET AL.	514	44
	BJ	5,587,469	12-24-96	COOK ET AL.	536	13.1
	BK	5,587,470	12-24-96	COOK ET AL.	536	13.1
	BL	5,599,797	2-4-97	COOK ET AL.	514	44
	BM	5,602,240	2-11-97	DE MESMAEKER ETAL	536	12.1
	BN	5,608,046	3-4-97	COOK ET AL.	536	13.1
	BO	5,610,289	3-11-97	COOK ET AL.	536	15.34
	BP	4,309,404	1-5-82	DENEALE ET AL.	421	11
	BQ	4,309,406	1-5-82	GULEY ET AL.	424	11
	BR	4,704,295	11-3-87	PORTER ET AL.	427	

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Country	Translation YES NO	

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	Filing Date January 31, 2001	Group Not Yet Assigned

## U. S. PATENT DOCUMENTS

Examiner		Document	Date	Name	Class	Subclass
	BS	4,556,552	12/3/85	PORTER ET AL.	424	32

## FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES	NO

EXAMINER

DATE CONSIDERED